

REMARKS

Claims 1 through 30 are pending in this application.

In the following, the Examiner's comments are included in bold, indented type, followed by the Applicants' remarks:

1. **Claims 1-30 are pending in this Office Action.**

Applicants agree.

Applicant argues that Bapat does not teach "each object in the hierarchy is associated with a query and recursively retrieving object definitions for one or more database objects associated with a query to produce an ordered set of object definition". Bapat teaches that each object in the hierarchy is processed by a loop beginning at step 292, which selects every class definition in the object class hierarchy. Each class definition is retrieved at step 292 until no more objects in hierarchy are processed. Each object in the hierarchy is processed when the application make a call to the new method such as retrieve. It means that objects in the hierarchy are associated with the application's call. The application's call is represented as a query. Recursively is defined as to repeat again. Since each class definition, which is retrieved in a loop, is repeated many times until no more objects class in hierarchy is processed, thus, each class definition in hierarchy is retrieved recursively and in order. Each class definition contains one or more object definitions. For the above reasons, definitely, when system retrieves each class definition in hierarchy, the system retrieves each object definition of the class definition to produce an ordered set of object definitions too (fig. 13, col. 10, lines 35-65; col. 6, lines 65-67).

Applicant argues that Bapat does not teach "building a copy of the database structure using the ordered set of object definitions". Bapat teaches that a class hierarchy structure is translated into the relational table structure by mapping parent class 22 to a table 32. In a similar manner, class 24 is mapped to a table 38. A class in hierarchy includes objects definitions. Since the system maps parent class 22 to a table 32 before mapping class 24 to a table 38, thus the system retrieves set of class. Definitions or object definitions in order. By mapping a class hierarchy structure into the relational table, the system creates a relational table structure, which contains all of Classes or objects of the hierarchy structure. Thus, the relational table structures are presented as a copy of the hierarchy class structure. The hierarchy class structure is a data structure (col. 6, lines 60-65; col. 7, lines 1-5, figs. 1-3).

Applicant argues that Bapat does not teach "categorizing each identified object into a category". Bapat teaches class site contains object name, address, phone no., site-category. Class vendor contain object vendor name. object vendor address, object vendor phone number. The

above information shows that each object is classified into different classes.
Each class is represented as a category (col. 19. lines 35-50).

Applicants respectfully disagree. Applicants reiterate their previous arguments made in earlier responses with the same force and effect as if they were repeated here. Moreover, the Applicants disagree with the examiner's assertion that "[t]he application's call is represented as a query." The call is from a program to another program, not a query that is given to a database, as is contemplated in the present invention. Bapat is directed toward generating a *translation* of objects that are *outside* the database into a different form (relational tables) in the database. Consequently, the activity that Bapat teaches resides outside of the database, and is thus not initiated by a database query. In contrast, the claims of the present invention are directed toward receiving a *database query* because the activities are performed by the database itself. Finally, the Applicants disagree with the Examiner's assertion that systematically reviewing objects outside the database creates an order set of object definitions. On the contrary, the object definitions that exist within Bapat are both outside the database, and are never placed in an ordered set of object definitions. In direct contradiction to Bapat, the limitations of the independent claims require the generation of an order set of object definitions from information within the database.

Applicants respectfully point out that independent claims 1, 11 and 21 have been amended to make explicit what was already implicit in the original claim – that the recursive retrieval of the object definitions are within the database and not outside the database as in U.S. Patent No. 5,295,256 ("Bapat"). It is respectfully submitted that Bapat does not teach or describe using a database query to obtain – as an intermediate value – the object definitions of database objects within a database. It is respectfully submitted that amended claims 1, 11 and 21 are not obvious in view of Bapat, and that independent claims 1, 11 and 21 are allowable over the prior art of record. Reconsideration and withdrawal of the rejection are respectfully requested.

As to claims 1, 11 and 21, Bapat teaches the claimed limitations:

“recursively retrieving object definitions for one or more database objects associated with a query to produce an ordered set of objects definitions” as each object in the hierarchy is processed by a loop beginning at step 292, which selects every class definition in the object class hierarchy. Each class definition is retrieved at step 292 until no more objects in hierarchy are processed. Each object in the hierarchy is processed when the application makes a call to the new method such as retrieve. It means that objects in the hierarchy are associated with the application’s call. Thus, each object in hierarchy is associated with the application’s call. The application’s call, is represented as a query. Recursively is defined as to repeat again. Since each class definition, which is retrieved in a loop is repeated many times until no more objects class in hierarchy is processed, thus, each class definition in hierarchy, is retrieved recursively and in order. Each class definition contains one or more object definitions. For the above reasons, definitely, when system retrieving each class definition in hierarchy, the system retrieves each object definition of the class definition to produce an ordered set of object definitions too (fig. 13, col. 10, lines 35-65; col. 6, lines 65-67).

Bapat does not clearly teach the claimed limitation “building a copy of the database structure using the ordered set of object definition”. Bapat teaches a class hierarchy structure is translated into the relational table structure by mapping parent class 22 to a table 32. In a similar manner, class 24 is mapped to a table 38. A class in hierarchy includes objects definitions. Since, the system maps parent class 2,2 to a table 32 before mapping class 24 to a table 38, thus the system retrieves set of class definitions or object definitions in order. By mapping a class hierarchy structure into the relational table, the system creates a relational table structure, which contains all of classes or objects of the hierarchy structure. Thus, the relational table structures are, presented as a copy of the hierarchy class structure. The hierarchy class structure is a data structure (col. 6, lines 69-65; col. 7, lines 1-5, figs. 1-3).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Bapat’s teaching of a class hierarchy structure is translated into the relational table structure by mapping all classes to tables of a data, structure in order to allow any user can create a new data structure in order or store objects in a new data structure for future processing when the system is corrupted.

Applicants respectfully disagree and submit that Bapat does not disclose, teach, or suggest each and every feature recited in Applicants' independent Claims 1, 11, and 21. Applicants reiterate their previous arguments made in earlier responses with the same force and effect as if they were repeated here. Moreover, the Applicants disagree with the examiner’s assertion that “[t]he application’s call is represented as a query.” Bapat is directed toward generating a *translation* of objects that are *outside* the database into a different form (relational

tables) in the database. The call is from a program to another program, not a query that is given to a database, as is contemplated in the present invention. Consequently, the activity that Bapat teaches resides outside of the database, and is thus not initiated by a database query. In contrast, the claims of the present invention are directed toward receiving a *database query* because the activities are performed by the database itself. Finally, the Applicants disagree with the Examiner's assertion that systematically reviewing objects outside the database creates an order set of object definitions. On the contrary, the object definitions that exist within Bapat are both outside the database, and are never placed in an ordered set of object definitions. In direct contradiction to Bapat, the limitations of the independent claims require the generation of an order set of object definitions from information within the database.

Applicants respectfully point out that independent claims 1, 11 and 21 have been amended to make explicit what was already implicit in the original claim – that the recursive retrieval of the object definitions are within the database and not outside the database as in U.S. Patent No. 5,295,256 ("Bapat"). It is respectfully submitted that Bapat does not teach or describe using a database query to obtain – as an intermediate value – the object definitions of database objects within a database. It is respectfully submitted that amended claims 1, 11 and 21 are not obvious in view of Bapat, and that independent claims 1, 11 and 21 are allowable over the prior art of record.

For the reasons given above, the Applicant's respectfully request reconsideration and withdrawal of the rejection.

As to claims 2, 12 and 22 Bapat teaches the claimed limitations:

"recursively identifying objects associated with the query (col. 10, lines 35-45);

"categorizing each identified object into a category" as (col. 21, lines 30-60; col. 35, lines 65-67);

"retrieving an object definition for each identified object using a tool corresponding to the category with which the identified object is connected" as each object in the hierarchy is processed by a loop beginning at step 292 which selects every class definition in the object class hierarchy. Each class is retrieved. The system has the type of object. The above information shows that the system has included a tool to retrieve an object

definition corresponding to the type of an object are connected (col. 10, lines 35-45; col. 35, lines 65-67).

Applicants respectfully disagree. First, dependent Claims 2, 12, and 22 depend upon independent Claims 1, 11, and 21, respectively. Thus, Claims 2, 12, and 22 are not obvious over Bapat at least because they include the limitations of their respective independent claim, which Applicants have shown above to be allowable.

Second, Applicants submit that Claims 2, 12, and 22 recite additional features that further distinguish the art. For example, Claim 2 recites "recursively identifying objects associated with the query." Claims 12 and 22 recite certain similar features and operations. For reasons similar to those discussed above with regard to Claim 1, Applicants respectfully submit that Bapat does not disclose, teach, or suggest each and every element as set forth in Applicants' Claims 2, 12, and 22. The recited features are absent from the teachings of Bapat.

Additionally, Claim 2 recites "categorizing each identified object into a category." Claims 12 and 22 recite certain similar features and operations. As discussed above, however, The system of Bapat merely uses object definitions for a class to impose structure on a hierarchical schema to produce tables representing each class in the hierarchical schema. Thus, Bapat discloses rules and conventions used to create the schema. (Column 20, line 63 through Column 21, line 25). For example, "attributes having primitive types such as character, integer, etc. are converted to columns of the corresponding type, with appropriate width to store the largest possible value." (Column 21, lines 5-8). Additionally, "attributes having class or struct types are converted to columns which contain a numeric reference to a record into the table for that class or struct, which must already exist in another table." Column 21, lines 9-12). Thus, the rules and conventions disclosed in Bapat are merely used to place the attributes associated with a class into a table dedicated to that class. Accordingly, the commands cited by the Examiner as disclosing Applicant's recited claim elements are merely example commands for generating the class tables. Bapat does not disclose, teach, or suggest "categorizing each identified object into a category," as recited in Applicants' Claims.

For these reasons, Applicants respectfully request that the rejections of Claims 2, 12 and 22 be withdrawn.

As to claim 9, 19 and 29, Bapat teaches the claimed limitation "the object definitions are ordered so that each object definition is ordered before the definition of any object that reference it" as each object in the hierarchy is processed by a loop beginning at step 292 which selects every class definition in the object class hierarchy. Each class definition is retrieved. Multiple inheritance-in which a class may inherit attributes from more than on parent class is easily handled by creating one reference column as a pointer into the schema for each parent class. The above information shows that class definitions are stored in order in the object class hierarchy before the definition of any object that reference it (col. 10, lines 35-45; col. 23, lines 45-55).

Applicants respectfully disagree. First, dependent Claims 9, 19, and 29 depend upon independent Claims 1, 11, and 21, respectively. Thus, Claims 9, 19, and 29 are not obvious over Bapat at least because they include the limitations of their respective independent claim, which Applicants have shown above to be allowable.

Second, Applicants submit that Claims 9, 19, and 29 recite additional features that further distinguish the art. For example, Claim 9 recites that "the object definitions are ordered so that each object definition is ordered before the definition of any object that references it." Claims 19 and 29 recite certain similar features and operations. The Examiner points to Column 23, lines 45-55 of Bapat for disclosure of the recited features, which states that "a class may inherit attributes from more than one parent class" and that this is "easily handled by creating one reference column as a pointer into the schema for each parent class." Accordingly, Bapat merely discloses linking a column of a class to each parent class. The cited portion of Bapat does not disclose that "the object definitions are ordered so that each object definition is ordered so that each definition is ordered before the definition of any object that references it," as recited in Applicants' claims. The recited features are absent from the teachings of Bapat.

For these reasons, Applicants respectfully request that the rejections of Claims 9, 19 and 29 be withdrawn.

As to claims 10, 20 and 30, Bapat does not clearly teach the claimed limitation "recursively retrieving object definition for one or more database object includes looking for references to the one or more database objects in a data dictionary". However, Bapat teaches that each object in the hierarchy is processed by a loop beginning at step 292 which selects every class definition in the object class hierarchy. Each class definition is retrieved. Multiple inheritance-in which a class may inherit attributes from more than one parent class-is easily handled by creating one reference column as a pointer into the schema for each parent class. An Object Dictionary contains metaclass information, or information about the overall schema of the application domain. The population of the Object Dictionary was described in detail in connection with FIG. 11. It contains the list of all classes, and includes information about attributes, superclasses, subclasses, and methods (col. 10, lines 35-45; col. 23, lines 45-55; Col. 44, lines 45-60). Since objects are stored in hierarchy which included classes, thus, it is obvious that retrieving object definition includes looking for references to the one or more database objects in a object dictionary.

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Bapat's teaching of retrieving each class definition in the object class hierarchy. Object definition contains list of all classes, superclasses, subclasses. Multiple inheritance-in which a class may inherit attributes from more than one parent class is easily handled by creating one reference column as a pointer into the schema for each parent class in order to read or create structure of objects during processing objects.

Applicants respectfully disagree. Dependent Claims 10, 20, and 30 depend upon independent Claims 1, 11, and 21, respectively. Thus, Claims 10, 20, and 30 are not obvious over Bapat at least because they include the limitations of their respective independent claim, which Applicants have shown above to be allowable. Although Applicants have not provided detailed arguments with respect to Claims 10, 20, and 30, Applicants remain ready to do so if it becomes appropriate.

For these reasons, Applicants respectfully request that the rejections of Claims 10, 20 and 30 be withdrawn.

4. Claims 3, 13 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bapat (USP 5,295,256) in view of Nackman et al (or hereinafter "Nackman") (USP 6,182,281).

As to claims 3, 13 and 23, Bapat teaches the claimed limitations the categories include tables and views, join indexes, trigger" as tables, views, the join column into the parent class table will be used as the unique index,

triggers (col. 8, line 20, col. 37, lines 30-35; col. 40, lines 1-5). Bapat fails to teach the claimed limitation "macros". However, Bapat teaches the different type of objects including tables, views, joined indexes (col. 8, line 20, col. 37, lines 30-35; col. 40, lines 1-5). Also, Nackman teaches Macros (col. 7, lines 35-37). It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Nackman's teaching of macros to Bapat's system in order to store a object in a dictionary.

Applicants respectfully disagree. First, dependent Claims 3, 13, and 23 depend upon independent Claims 1, 11, and 21, respectively. Thus, Claims 3, 19, and 29 are not obvious over Bapat at least because they include the limitations of their respective independent claim and intervening Claims 2, 12, and 22, which Applicants have shown above to be allowable.

Second, Applicants submit that Claims 3, 13, and 23 recite additional features that further distinguish the art. As discussed above with regard to Claims 2, 12, and 22, Bapat does not disclose categorizing each identified object into a category. Bapat also does not disclose categories that "include tables, views, join, indexes, triggers and macros," as recited in Applicants' Claims 3, 13 and 23. For disclosure of the recited categories, the Examiner has pointed to three sentences found in Bapat and one sentence found in Nackman. The cited portions from Bapat, however, are from three different sections of the reference and describe three entirely different concepts that are unrelated to the categorizing of identified objects. Similarly, Nackman does not disclose categorizing identified objects as a macro. It appears that the Examiner has merely performed a keyword search of the claimed terms to locate the terms in the text of Bapat to perform what amounts to a "keyword rejection." Significantly, however, the keywords are taken out of context and do not teach, suggest, or disclose the claimed aspects of the present invention. For example, Bapat refers to a "views option," which if requested, allows tables to appear to be flattened to the user upon creation. (Column 8, lines 20-23). These and other keyword rejections indicate the Examiner's failure to appreciate the distinctions between Bapat and the claimed invention

For at least these reasons, Applicants respectfully request that the rejections of Claims 3, 13 and 23 be withdrawn.

5. Claims 4, 14 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bapat in view of Nackman and Tung Ng et al (or hereinafter "Tung") (USP 6,279,008).

As to claims 4, 14 and 24, Bapat discloses the claimed limitation subject matter in claim 1, except the claimed limitation "the tool is view statement if the identified object.... as a macro". However, Bapat teaches the source SQL statement for defining triggers, create table SQL command (col. 10, lines 40-45; col. 40, lines 1-5). Also, Tung's teaching of show-table-view button 1105 to show a view of tables corresponding to the database state 1204. The table view permits access to tables and database information associated with the database application state 1206 (col. 11, lines 60-67). Nackman teaches any Macros defined in the source, recognized by #defined command (col. 10, lines 32-35).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Bapat's teaching of the source SQL statement for defining triggers, create table SQL command, Tung's teaching of show-table-view button 1105 to show a view of tables corresponding to the database state 1204. The table view permits access to tables and database information associated with the database application state 1206 and Nackman's teaching of any Macros recognized by # defined command in order to allow any user can have many choices for displaying objects or displaying configuration of any object to a user.

Applicants respectfully disagree. First, dependent Claims 4, 14, and 24 depend upon independent Claims 1, 11, and 21, respectively. Thus, Claims 4, 14, and 24 are not obvious over the cited references at least because they include the limitations of their respective independent claim and intervening Claims 2, 12, and 22, which Applicants have shown above to be allowable. Second, Applicants submit that the claims recite additional features that further distinguish the art. To avoid burdening the record and because Applicants have shown Claims 1-2, 11-12, and 21-22 to be allowable, Applicants have not provided detailed arguments with respect to Claims 10, 20, and 30. However, Applicants remain ready to do so if it becomes appropriate.

For these reasons, Applicants respectfully request that the rejections of Claims 4, 14 and 24 be withdrawn.

6. Claims 5, 15 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bapat in view of Ma et al (or hereinafter "Ma") (USP 5,920,725).

As to claims 5, 15 and 25, Bapat teaches the claimed limitation "retrieving unretrieved object definition...the query" as (col. 10, lines 35-45). Bapat does not teach the claimed limitation "adding to the set of objects known to be associated with query...associated with the query...repeating items a and b...associated with the query". However, Bapat teaches each object in the hierarchy is processed by a loop beginning at step 292 which selects every class definition in the object class hierarchy. Each class definition is retrieved (col. 10, lines 35-45). Also, Ma teaches to insert a new field in database records requires that the database's format or schema be modified, step 30. Adding the cell-phone held to the database's records can be accomplished with the statement: alter table employee add cellno varchar 20, which alters the employee table by adding a field named "cellno" having up to 20 characters. The interfaces or input and output parameters for program objects which read database records are modified, step 32. The interfaces of many objects can be modified by changing the data structure for accessing the database by adding the new field: Class employee [private: char name[64]; char address[255]; char officeno[20]; char hiredate[10]; float salary; char dept[32]; (col. 2, lines 50-67). The above information shows that the system add a field named cellno associated with query to a data structure which include class employee. This class employee is represented as a object definition.

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Bapat's teaching of retrieving object definitions and Ma's teaching adding a field name to class employee in order to maintain object definition.

Applicants respectfully disagree. First, dependent Claims 5, 15, and 25 depend upon independent Claims 1, 11, and 21, respectively. Thus, Claims 5, 15, and 25 are not obvious over the cited references at least because they include the limitations of their respective independent claim, which Applicants have shown above to be allowable.

Second, Applicants submit that the claims recite additional features that further distinguish the art. For example, Claim 5 recites "adding to a set of objects known to be associated with the query those objects contained in the retrieved object definitions that are not already in the set of objects known to be associated with the query." Claims 15 and 25 recite certain similar features and operations. The Examiner relies on Ma for disclosure of the recited elements. However, Ma discloses a "distributed client-server application" that may be "modified while running." (Abstract). For example, Ma describes that "as technology progresses and the business changes, additional fields are needed. As more employees carry cellular phones, a cell-phone field may need to be added to a record." (Column 2, lines 29-32). "Adding the cellular phone field requires changes in the server's database, server objects, and

client objects that view and edit the phone records." (Column 2, lines 35-37). "To insert a new field in database records requires that the database's format or schema be modified, step 30." (Column 2, lines 50-67). Thus, the portion of Ma cited by the Examiner merely provides an example algorithm for adding the new field. Accordingly, Applicants respectfully submit that Ma does not disclose, teach, or suggest "adding to a set of objects known to be associated with the query those objects contained in the retrieved object definitions that are not already in the set of objects known to be associated with the query." Thus, the recited features and operations are absent from the teachings of both Bapat and Ma.

Third, assuming for purposes of argument only that the proposed combination discloses the limitations of Claims 5, 15, and 25, the Examiner has not cited language in either reference or within information commonly known to those skilled in the art that provides the necessary motivation or suggestion to combine these two references. Moreover, it would not have been obvious to one skilled in the art to make the combination. As discussed above, the system of Bapat uses object definitions for a class to impose structure on a hierarchical schema to produce tables representing each class in the hierarchical schema. By contrast, Ma discloses a method and system for adding fields to an already created database. Accordingly, one of ordinary skill in the art at the time of the invention would not be motivated to combine the schema of Bapat with the method for adding fields disclosed in Ma.

For these reasons, Applicants respectfully request that the rejections of Claims 5, 15 and 25 be withdrawn.

7. Claims 6, 16 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bapat in view of Tung.

As to claims 6, 16 and 26, Bapat discloses the claimed limitation subject matter in claim 1, except the claimed limitation "sending the ordered set of object definitions from a first computer to a second computer". However, Bapat teaches retrieving each object definitions (col. 10, lines 35-45). Also, Tung teaches that client sends database requests over Internet to server (col. 5, lines 55-57).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Bapat's teaching of

retrieving each object definitions and Tung's teaching of sending database requests from client computer to server in order to allow a user can create a new database structure based on retrieved object definitions.

Applicants respectfully disagree. First, dependent Claims 6, 16, and 26 depend upon independent Claims 1, 11, and 21, respectively. Thus, Claims 6, 16, and 26 are not obvious over the cited references at least because they include the limitations of their respective independent claim, which Applicants have shown above to be allowable. Second, Applicants submit that the claims recite additional features that further distinguish the art. To avoid burdening the record and because Applicants have shown Claims 1, 11, and 21 to be allowable, Applicants have not provided detailed arguments with respect to Claims 6, 16, and 20. However, Applicants remain ready to do so if it becomes appropriate.

For these reasons, Applicants respectfully request that the rejections of Claims 6, 16 and 26 be withdrawn.

8. Claims 7-8, 8-18, 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bapat (USP 5,295,256) in view of Henckel (USP 6,105,036).

As to claims 7, 17 and 27, Bapat discloses the claimed limitation subject matter in claim 1, except the claimed limitation "changing the order of the ordered set of object definitions". However, Bapat teach each object in the hierarchy is processed by a loop beginning at step 292 which selects every class definition in the object class hierarchy. Each class definition is retrieved. This information shows that class definitions are stored in order in the object class hierarchy. Thus, each class definitions is retrieved in order (col. 10, lines 35-45). Also, Henckel teaches that the ordered arrangement of object definitions such that a visual indication of the arrangement of such object definitions in source code file is maintained. It means that the ordered arrangement of object definitions is modified (abstract, col. 6, lines 20-50).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Bapat's teaching of retrieving each object definitions and Henckel's teaching of the ordered arrangement of object definitions such that a visual indication of the arrangement of such object definitions in source code file is maintained to Bapat's system in order to save time for searching or displaying a object.

Applicants respectfully disagree. First, dependent Claims 7, 17, and 27 depend upon independent Claims 1, 11, and 21, respectively. Thus, Claims 7, 17, and 27 are not obvious over

the cited references at least because they include the limitations of their respective independent claim, which Applicants have shown above to be allowable.

Second, Applicants submit that the claims recite additional features that further distinguish the art. For example, Claim 7 recites "changing the order of the ordered set of object definitions." Claims 17 and 27 recite certain similar features and operations. Specifically, the Examiner relies on Henckel for disclosure of the recited elements. However, Henckel discloses a "computer system and method of displaying a source code file with an ordered arrangement of object definitions of multimedia objects selectively display the object definitions in either textual or multimedia representation in response to user input." (Abstract). For example, Figure 3 "illustrates a window 60 utilized by editor 30 and displaying a portion of the contents of source code file 40. Within source code file 40 is an object definition for a shape node 42, which is defined at line 17 and closed at line 24." (Column 7, lines 43-46). "It should be appreciated that nodes 42-46 are all illustrated in textual representations in Fig. 3. Consistent with the invention, any or all of these nodes may be toggled to be displayed in multimedia representations. For example, as shown in Fig. 4, in response to a user input, node 42 may be toggled from a textual representation to an inlined multimedia representation 42a displayed in a panel 62." (Column 7, lines 53-59). "As is evident from Fig. 4, multimedia representation 42a is inlined in the display of the source code file, and specifically, displayed within the same window as the other object definitions. The multimedia representation is vertically orientated within the other object definitions to maintain the ordered arrangement thereof." (Column 7, line 66 through Column 8, line 4 (emphasis added)). As such, Henckel is limited to a system for displaying textual representations and multimedia representations while maintaining the ordered arrangement. Accordingly, Henckel does not disclose, teach, or suggest "changing the order of the ordered set of object definitions." Thus, the recited features and operations are absent from the teachings of both Bapat and Ma.

Third, assuming for purposes of argument only that the proposed combination discloses the limitations of Claims 7, 17, and 27, the Examiner has not cited language in either reference or within information commonly known to those skilled in the art that provides the necessary

motivation or suggestion to combine these two references. Moreover, it would not have been obvious to one skilled in the art to make the combination. As discussed above, Bapat is limited to a system that uses object definitions for a class to impose structure on a hierarchical schema to produce tables representing each class in the hierarchical schema. By contrast, Henckel discloses a method and system for displaying a source code file with an ordered arrangement of object definitions in either textual or multimedia representations." Applicants respectfully submit that, one of ordinary skill in the art at the time of the invention would not be motivated to combine the schema of Bapat with the method for toggling multimedia representations disclosed in Henckel.

For these reasons, Applicants respectfully request that the rejections of Claims 7, 17 and 27 be withdrawn.

As to claims 8, 18, and 28, Bapat discloses the claimed limitation subject matter in claim 1, except the claimed limitation "changing the order of the order set of object definition.....reference it". However, Bapat teach each object in the hierarchy is processed by a loop beginning at step 292 which selects every class definition in the object class hierarchy. Each class definition is retrieved. This information shows that class definitions are stored in order in the object class hierarchy. Thus, each class definitions is retrieved in order (col. 10, lines 35-45). Also, Henckel teaches that the ordered arrangement of object definitions such that a visual indication of the arrangement of such object definitions in source code file is maintained. It means that the ordered arrangement of object definitions is modified (abstract, Col. 6, lines 20-50).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Bapat's teaching of retrieving each object definitions and Henckel's teaching of the ordered arrangement of object definitions such that a visual indication of the arrangement of such object definitions in source code file is maintained to Bapat's system in order to save time for searching or displaying a object.

Applicants respectfully disagree. First, dependent Claims 8, 18, and 28 depend upon independent Claims 1, 11, and 21, respectively. Thus, Claims 8, 18, and 28 are not obvious over the cited references at least because they include the limitations of their respective independent claim and intervening Claims 7, 17, and 27, which Applicants have shown above to be allowable.

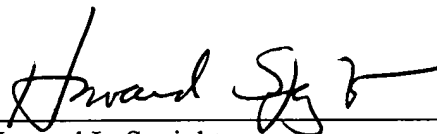
Second, Applicants submit that the claims recite additional features that further distinguish the art. For example, Claim 8 recites that "changing the order of the ordered set of object definitions includes reordering the object definitions so that each object definition is ordered before the definition of any object that references it." Claims 18 and 28 recite certain similar features and operations. Again, the Examiner relies on Henckel for disclosure of these elements. As discussed above with regard to Claims 7, 17, and 27, however, Henckel does not disclose changing the order of the ordered set of object definitions. Accordingly, for reasons similar to those discussed above with regard to Claims 7, 17, and 27, Applicants respectfully submit that Bapat does not disclose, teach, or suggest each and every element as set forth in Applicants' Claims 8, 18, and 28. The recited features are absent from the cited references.

For these reasons, Applicants respectfully request that the rejections of Claims 8, 18 and 28 be withdrawn.

SUMMARY

Applicants contend that the claims are in condition for allowance, which action is requested. Applicants do not believe any fees are necessary with the submitting of this response. Should any fees be required, Applicants request that the fees be debited from deposit account number 50-1673.

Respectfully submitted,



Howard L. Speight
Reg. No. 37,733
Baker Botts L.L.P.
910 Louisiana
Houston, Texas 77002
Telephone: (713) 229-2057
Facsimile: (713) 229-2757
E.Mail: Howard.Speight@bakerbotts.com
ATTORNEY FOR APPLICANTS

Date: April 9, 2004